September 23, 2003

Mr. Jonas Minton
Deputy Director
California Department of Water Resources
1416 Ninth St, Room 1115-9
Sacramento, CA 94236-0001

**Re: California Water Plan Update 2003**

Dear Jonas:

The undersigned members of the Water Plan Advisory Committee have basic concerns about the tone and content of the current draft of the 2003 Water Plan (draft Plan). These concerns are not new. They have been expressed, both in AC meetings and in e-mails to Water Plan staff. Some concerns have been addressed in recent Water Plan drafts, but our most basic concerns have neither been addressed nor refuted.

General attitude toward agriculture

The tone of the document disregards the fact that agriculture exists to meet the most basic needs of society by producing food and other essential farm products. The crops farmers grow are in response to these public needs as expressed through the market. It is commonly known that farm products consume more water than is required to meet other urban needs. It is implied throughout the draft Plan that it is unreasonable for agriculture to use as much water as it now uses. There is repeated reference to the "desires" of agriculture, with an implication that meeting those "desires" is not important to society, but only to farmers. Agricultural water is discussed in terms of acres of land rather than in terms of the water supply needed to produce the products desired by our society.

Assertions on Adequacy of the Current Water Supply

The tone of Chapter 1 and elsewhere in Volume 1 is that California's current water supply is nearly adequate to provide for agricultural and urban uses, but that the environment is still deficient. Chapter 1 does not mention that the available water supply and its current use is not

sustainable. The current supply includes a substantial, continuing and unsustainable overdraft of groundwater. If the State's water supply is inadequate to meet future needs, the overdraft of this resource will increase.

The Plan speaks at length about the need for and effectiveness of increased efficiency in agricultural and urban water use, but does not address the possibilities for the same kinds of increases in efficiency of environmental use. Nor does the plan address the fact that there are more ways to achieve environmental goals than by reallocating water from agricultural and urban uses to environmental ones. There should be some discussion of the possibilities of achieving environmental, especially fish population, goals by approaches other than water reallocation. In other words, environmental uses of water should be held to the same standards of efficiency and broadness in scope of solutions that agricultural and urban uses are held.

It is predicted that the proposed water transfer from agriculture to urban use in order to maintain flow in the Colorado River Aqueduct will have harmful impacts on the Salton Sea. Mitigation of these impacts is costly. However, the water must either be conserved from agricultural use or the urban users of the South Coast Region must reduce their use or find alternative sources of water to make up for California's mandated reduction in Colorado River water. At the same time, groundwater overdraft continues in the rapidly growing Palm Springs and Coachella area where recreation and agriculture are the predominant economic activities.

Urban sprawl and other transfers of water from farm, including fallowing and taking lands out of production, to urban use, all selectively reduce the portion of the State's water supply that is available for agricultural production in meeting the public's need for farm products. The draft Plan, as currently written, advocates a decrease of today's farm water supply by disregarding the increasing population and the resultant growing public need for agricultural products.

Applied versus Consumptive Use of Water

The draft Plan does not consistently distinguish between applied and consumed water. The draft Plan implies that there are substantial savings from current water usage, but are not shown as

"real" water. Furthermore, it does not explain why and where applied, but unconsumed water, is already recaptured and reused. As DWR and the modelers know, more efficient toilets and appliances can reduce a city's need for new treatment and distribution facilities, but most of the unconsumed water is already recaptured in streams and groundwater basins, and reused in the Central Valley and other places unless it flows to a salt sink. Yet, at the August AC meeting, it was reported that reducing domestic use of unconsumed water was listed as a very major available water supply source from this reduced water demand to meet the State's needs. Most of the "new" water from draft Plan 8/28/03 table's list of "Potential New Water Benefits" is not 'real water'.

Multi-dry Years and Droughts

The draft Plan provides very little discussion of the consequences of the sequential dry years that result in maximum stress on water supplies. It also assumes that urban and environmental needs in dry years can be allocated a larger proportion of the available dry-year supply by reducing the agricultural proportion of that supply. This assumes that some agriculture production can be sustained by larger groundwater overdrafts, and in part by reducing ag production by fallowing to a greater degree than the reduction of the water supply for other uses. Unless the final Plan provides an adequate water supply for all uses it will exacerbate rather than reduce the net long-term overdraft and will thereby hasten the time when these large overdrafts during droughts are unavailable. To believe that the farm community can be periodically and substantially shut down and then rebound is unrealistic. If such an approach is taken, management and labor skills, food processing facilities, service industries and the market will be lost; Furthermore, farmers are being urged to grow high value perennial crops, which have high risks, high investment costs, and little ability to survive a drought year loss of water.

Climate Changes (pages 3-16, 3-17, and elsewhere)

The UC Davis Agricultural Issues Center (AIC) postulated that within the next 25 years there will be higher temperatures and higher levels of atmospheric carbon dioxide, and that this will make it possible to grow 15% more food with the same amount of water per acre. For the draft Plan to rely on a climate change in the postulated time scale and with the assumed pattern of

precipitation is much too speculative. The AIC further postulates that California will lose millions of acre-feet from the lack of snow pack, but will have more rain and, therefore, not have a reduction in farm water supply. The draft Plan does not propose a water replacement for the reduction of the snow pack, nor do we propose that it should, but neither should the draft Plan rely on any benefit from climate change.

Food Production per Acre-foot of Water Consumed

There is broad agreement among agricultural researchers that the amount of water that must be consumed by a plant in a given climate or soil type to produce a pound of biomass is unlikely to be significantly reduced. There have been increases in the portion of the produced biomass that is edible or otherwise valuable within the last 30 years. Some further improvements of this nature will no doubt occur, but it may be that the easy progress has already been made. Further improvements have been proposed by deficit irrigation of some crops, primarily tree and vine crops. However, this involves risks and expenses and may affect tree longevity. To some unquantified extent, the benefit of deficit irrigation is already occurring. We cannot count on substantial additional water savings from this process.

A recent UC Davis Agricultural Issues Center study indicates that there have been increases in agricultural production, as measured in dollar value, per acre-foot of water in recent decades and that we can count on an additional increase of 43% by 2030. It is not clear that the derivation of this number is valid. If we were to count on this increase, including this large extrapolation, and if the reduction in future water need from this increase in crop yield per unit of water consumed proved to be ethereal, it would then be too late to develop the increase in water supply needed to provide the public's need for farm products. If there is no significant increase in crop production per acre-foot of water consumed, California will need to increase the agricultural water supply in approximate proportion to population. It is, therefore, not prudent to assume more than a ten or fifteen percent decrease in the water needed to produce a pound of edible biomass or other useful product.

Crop Shifts

The draft Plan advocates saving water by growing crops that use less water per acre of crop. This disregards several consequences of making crop shifts for the purpose of saving water.

- It is costly to shift the growing of crops from year to year basis unless farmers know there will be a market for those low water use crops at an adequate price.

- Crops that consume less water per dollar of sales value typically also produce a lower volume of edible biomass or otherwise useful product. Shifting to such crops therefore reduces the total production of agricultural products. The ensuing deficit in food or fiber production, therefore, would have to be met from increasing the production of other crops or increasing the importation of food from foreign nations.

- The market demonstrates a strong public desire for dairy products. Sixty percent of ground beef also comes from dairy cattle. It is proposed that California produce less alfalfa and other forage crops used for dairy feed. Those crops consume a lot of water because they produce a lot of biomass. Cows consume the entire biomass of these crops.

- It is suggested that California should not grow the cotton that provides the clothes we wear or as an exportable commodity. Cotton plants are very much more salt tolerant than fruits, nuts, and vegetables. Cotton can, therefore, be grown on land utilizing more saline drainage water from other lands than is tolerated by other crops.

The draft Plan proposes that water demand be reduced by crop shifts, but does not discuss other considerations regarding maintaining salt balance on California irrigated land.

Surface Storage and CALFED

The final Plan has an obligation to estimate the water supply necessary to meet the State's future needs and to propose measures to provide that supply (Water Code 10004.6). CALFED has no such goal and obfuscates its intentions regarding water supply by talking about "water supply

reliability," which does not mean water supply adequacy. The Water Plan should not use the term reliability.

CALFED's five surface storage studies are not designed to increase water supply. They are designed primarily for various environmental benefits and for urban water quality benefits. Yet the draft Plan abdicates the State's responsibility for whatever new yield is needed via storage, and talks of CALFED storage yields of up to one million acre-feet. This would not be feasible even if it were intended.

The draft Plan rules out any other State or federal facilities to capture water flows to the San Francisco Bay that is in excess of established Delta outflow requirements. It will not be known whether or to what extent the capture of excess outflow will be available until the draft Plan includes estimates of the future water needs for each scenario and determines how much of that increased water supply or reduction in demand can result from recycling, conservation, etc. This is an abdication of the State's responsibility to exclude and fail to examine the usefulness of such facilities unless and until it is clearly determined that such facilities are necessary. If such facilities prove to be necessary, it will take too long to study, design, and construct when they are needed.

State Versus Regional Responsibility

Regions and local governments play a major role in water development. However, here again the State must not abdicate its responsibility to do for regions what they cannot do for themselves. Most regions cannot be self-sufficient in both water supply for direct use and water supply to produce the food and other products that the region exports. The current draft Plan is abdicating this responsibility and failing to comply with the law.

Balancing Cost Versus Adequacy, Dependability, and Risk

The public and the legislature must decide how to balance cost, adequacy, dependability, and risk with respect to the water supply for each category of use (Page 2-11). Regions and local government cannot do this because they cannot be self-sufficient in urban water supply, in

establishing environmental water demands, nor in water needed to produce the food, goods, and services that they export to other regions. DWR should not make this policy decision regarding the proper balance. Rather, DWR has the responsibility for supplying the information required for decision-makers to make an informed decision. The current draft Plan does not do this.

Groundwater Recharge

The draft Plan does not adequately clarify that in order for groundwater recharge to increase statewide as an available water supply, the water required for recharge must be water that would otherwise not be available for beneficial use. In most of California this is usually storm water that would otherwise flow to the ocean or salt sinks in excess of outflow requirements.

We urge the Department of Water Resources to revise the draft Plan to comply with the comments addressed above. If you do not wish to do so, please explain in written detail why you believe these comments should not be addressed.

Thank you for your consideration of our views.

Sincerely,

Alex Hildebrand
South Delta Water Agency

Bill DuBois
California Farm Bureau Federation

Lloyd Fryer
Kern County Water Agency

Brent Graham
Tulare Lake Basin Water Storage District

Joe Lima
Modesto Irrigation District

Nancy Pitligiano
Tulare County Farm Bureau

BJ Miller

Mike Wade
California Farm Water Coalition

cc: Mary D. Nichols, Secretary, Resources Agency

William Lyons, Jr., Secretary, CDFA

Michael Spear, Interim Director DWR

Steve Verigin, Acting Chief Deputy Director Steve Verigin, DWR